



Approval #

980016-U (Replaces 920062-U)

Safety & Buildings Division
201 West Washington Avenue
P.O. Box 2689
Madison, WI 53701

Wisconsin Material Approval

Material

RLP-2378 GSE Fabric Reinforced Liner

Manufacturer

Morton International
100 North Riverside Plaza
Chicago, Illinois 60606-1598

SCOPE OF EVALUATION

The RLP-2378 GSE fabric reinforced Liner by Morton International has been evaluated in accordance with s. **ILHR 10.125 ,10.345(1)(e)** of the Wisconsin Administrative Flammable and Combustible Liquids Code.

DESCRIPTION AND USE

Precoated fabric is installed over a prepared substrate. Seams are formed by overlapping the fabric at least 4 inches and sealing with RLP 2378-G coating. Two 18 to 20 mil coats of RLP 2378-G coating are then spray applied to the precoated fabric, to a minimum dry film thickness of 36-40 mils. The resulting membrane thickness, including 12-15 mil precoated fabric shall be a minimum of 50 mils.

Prior to installation, surfaces to be lined are made smooth and free of debris, roots, and angular or sharp rocks larger than 3/4 inch in diameter to a depth of 4 inches. The subgrade is compacted to provide a firm foundation without sudden or sharp changes in grade. Anchor trenches may be formed at the crest

of excavations to hold the liner in place. Acceptable substrates are smoothed clay soil, bentonite clay, compacted coarse sand and very fine well-compacted gravel if void of sharp angular stones. A protective geotextile fabric may be required over this base to prevent stones from migrating up beneath and puncturing the membrane.

All seams are oriented parallel to excavation slope.

Maintenance and repair procedures specified by Morton International shall be followed. The liner is not intended to contain a spill for prolonged periods. A visual inspection of the site for released product or liner damage should be conducted on a routine basis (daily if possible, or minimally, five days per week).

TESTS AND RESULTS

Gaynes Testing Laboratories, Ltd., supervised chemical compatibility testing on the liner before and after immersion in ASTM test fuels C and D, methyl tert butyl ether (MTBE), and ethanol. Specimens were tested before immersion and immediately after 7 days of immersion. Specimens exposed to 514 hours in a Xenon-Arc weather-ometer were tested in a similar manner. The physical property changes were within acceptable limits established by the department. Flammability testing was conducted in accordance with ASTM D635.

LIMITATIONS OF APPROVAL

The liner shall be installed in accordance with the manufacturer's recommendations and **s. ILHR 10.345 (1)(e)** under the supervision of an applicator approved by Morton International.

The liner is approved for use with MBTE, petroleum products and ethanol.

The liner is approved for use without placement of a soil layer over the liner as specified in **s. ILHR 10.345 (e) 2**. The total thickness of the liner may be 50 mils minimum rather than the minimum thickness specified in **10.345 (e) 2**.

Releases of product shall be addressed in accordance with the procedures specified in **secs. ILHR. 10.63, 10.635, 10.64, 10.66, 10.67**. The liner or portions of the liner that came in contact with product shall be replaced when determined to be necessary as a part of the release remediation.

Tank foundation designs and any discontinuities in the liner within the diked area shall be shown on plans including the method for assuring an adequate product-tight barrier. Tank foundations shall be designed to minimize the possibility of uneven or excessive settling.

This approval will be valid through December 31, 2003, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

DISCLAIMER

The department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement not specified in this document.

Reviewed by: _____

Approval Date: _____ By: _____

Richard Meyer, Architect
Chief, Code Development Section
Program Development Bureau